

Junction sequences of ChimeriVax™-JE (YF/JE) virus

Signalase

YAGA
MTGG
MTGG

MKL
VTL
MKL

Signalase

TNVHA
LGVGA
TNVGA

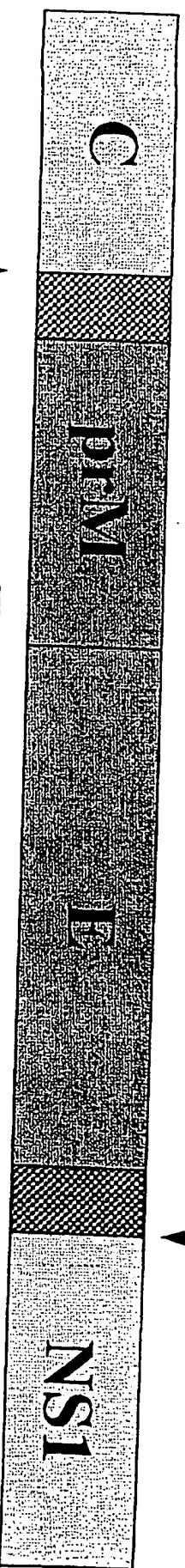
DTGCA
DQGCA
DQGCA

NS2B-3 protease*

NKR
KRR
KRR

GCNE
SHDV
SHDV

JE
YF
YF/JE



*: This cleavage is prerequisite for efficient signalase-mediated processing at the C/prM junction

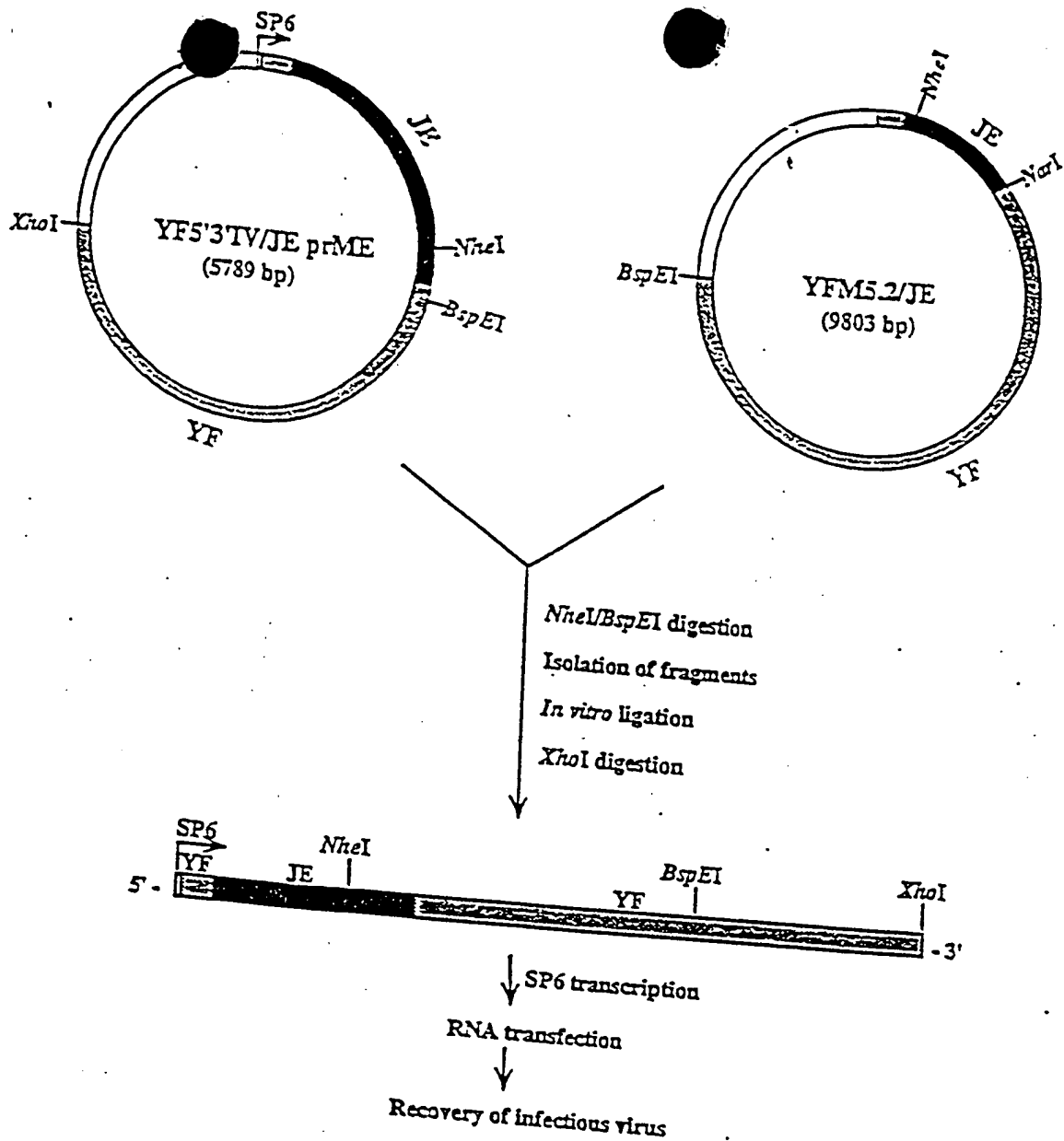


Fig. 2

09121537.072393

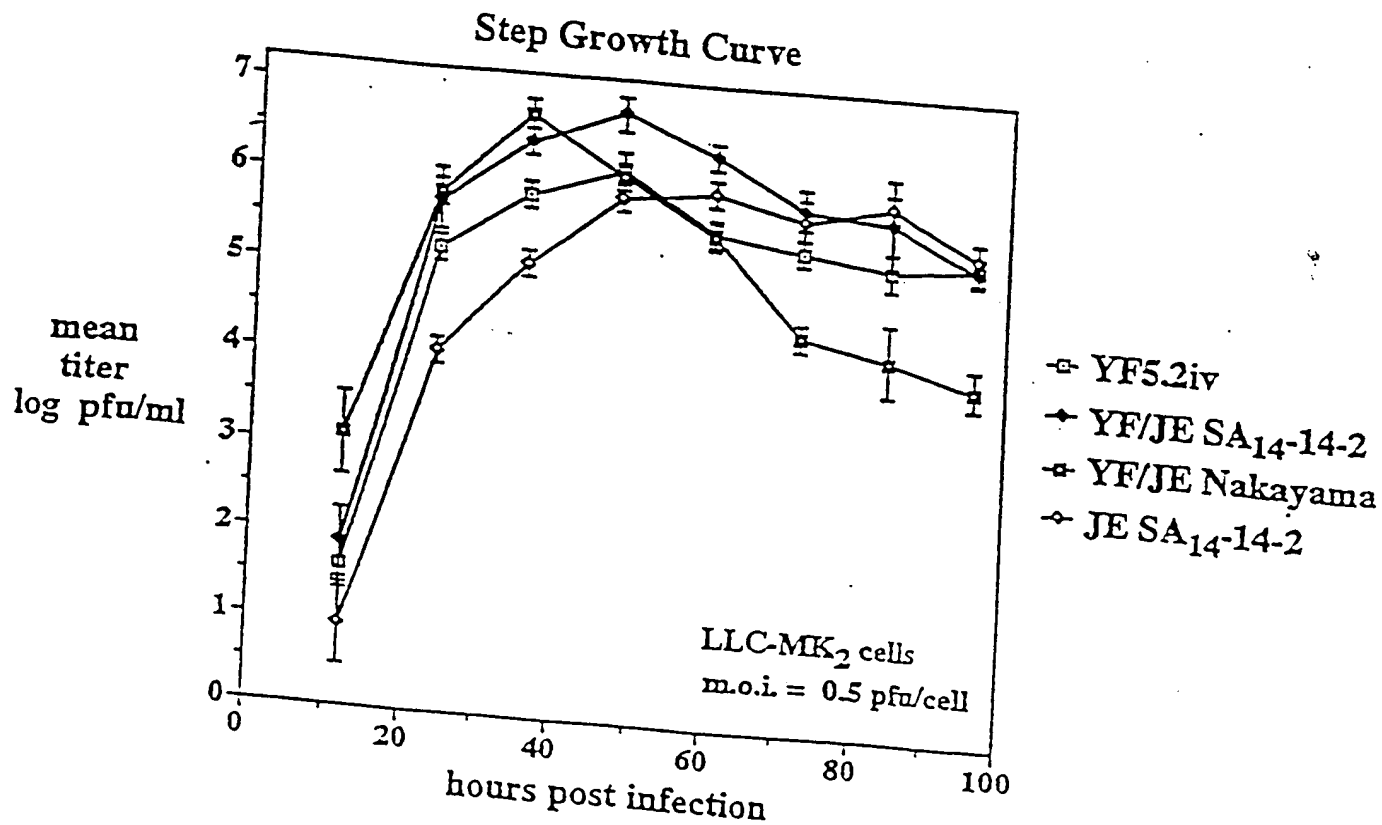
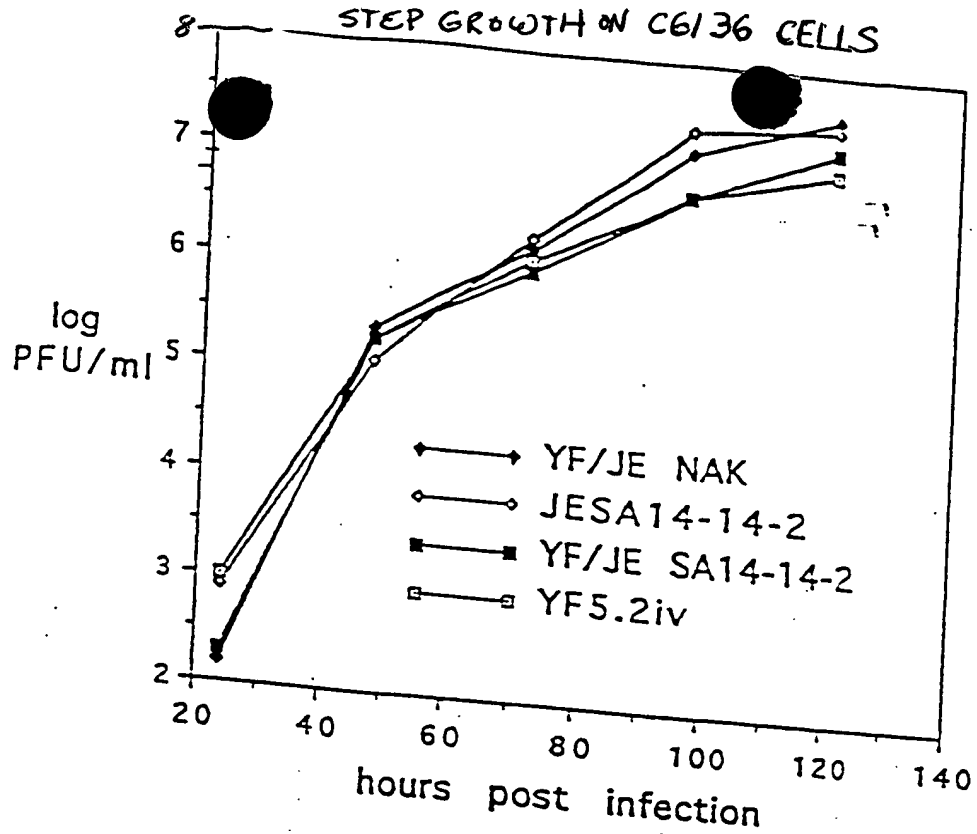


Fig 3

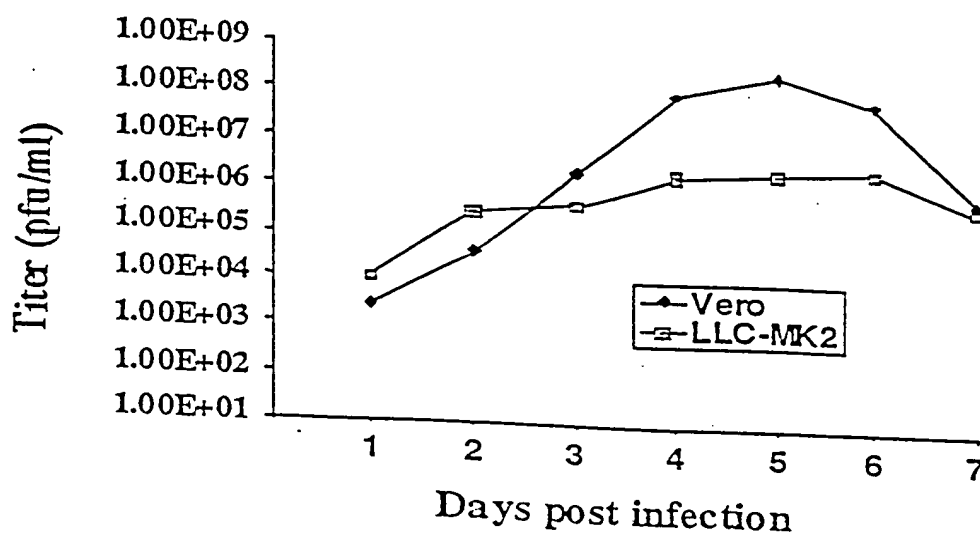
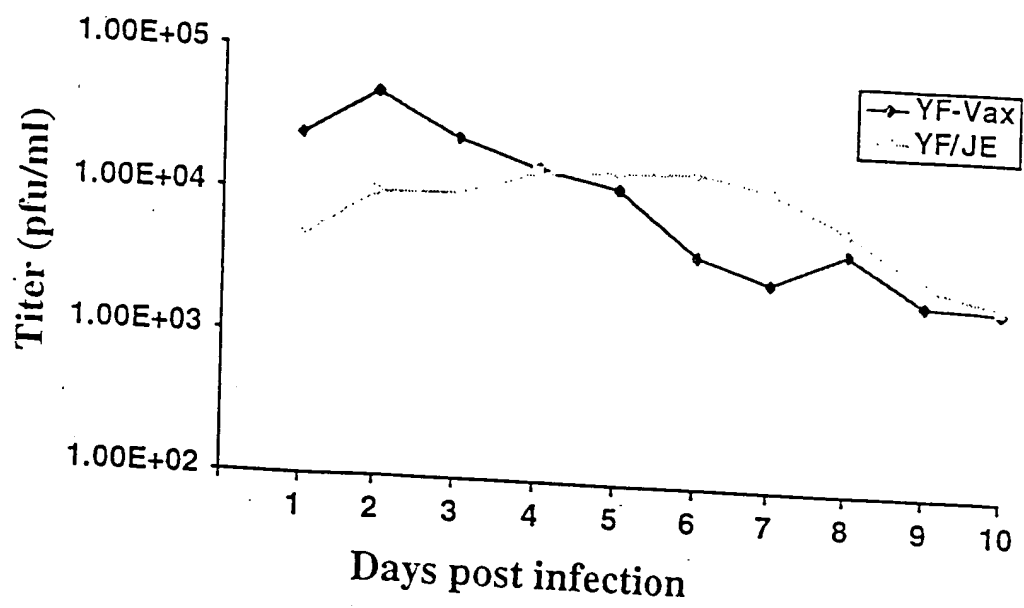


Fig. 4. Growth curves of RMS (YF/JE_{SA14-14-2}) in Vero and LLC-MK2 cells.

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362220-2857650



Growth comparison between RMS and YF-Vax in MRC-5 cells.

Fig.5

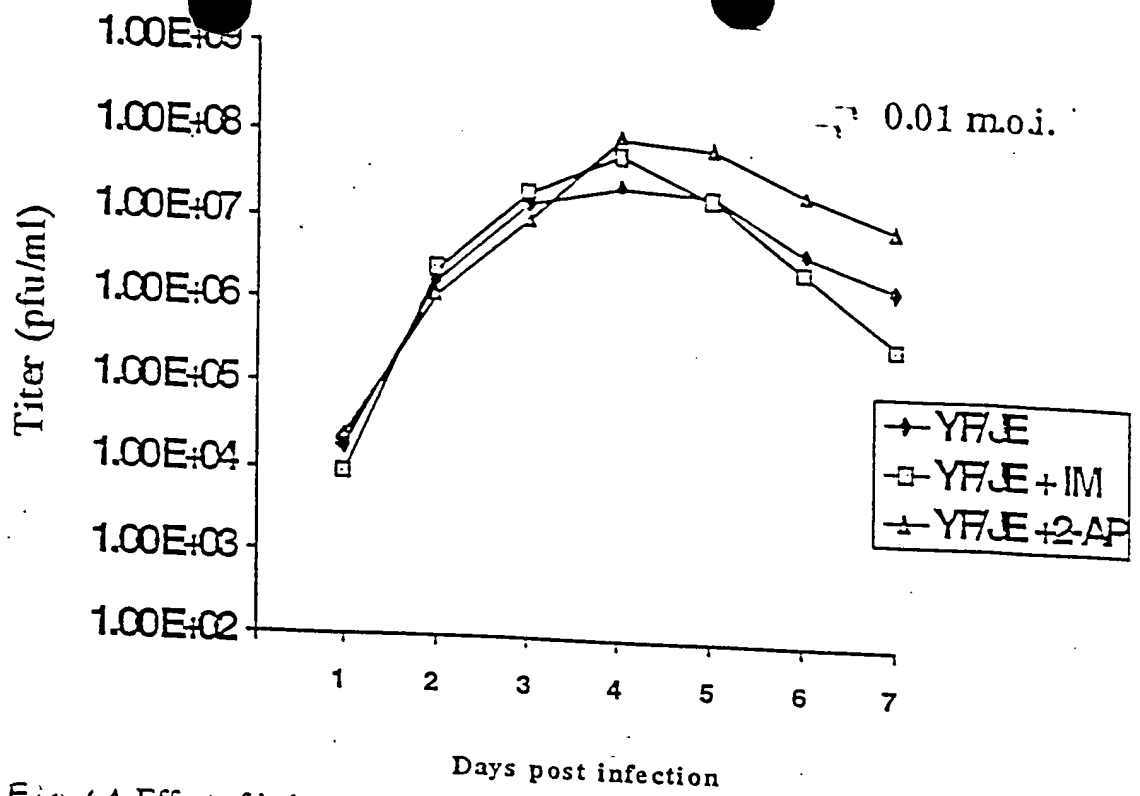


Fig. 6A, Effect of indomethacin (IM) or 2-aminopurine (2-AP) on growth kinetics of YF/JE (0.01 MOD) in FRhL cells

SA14-14-2

0011507-072398

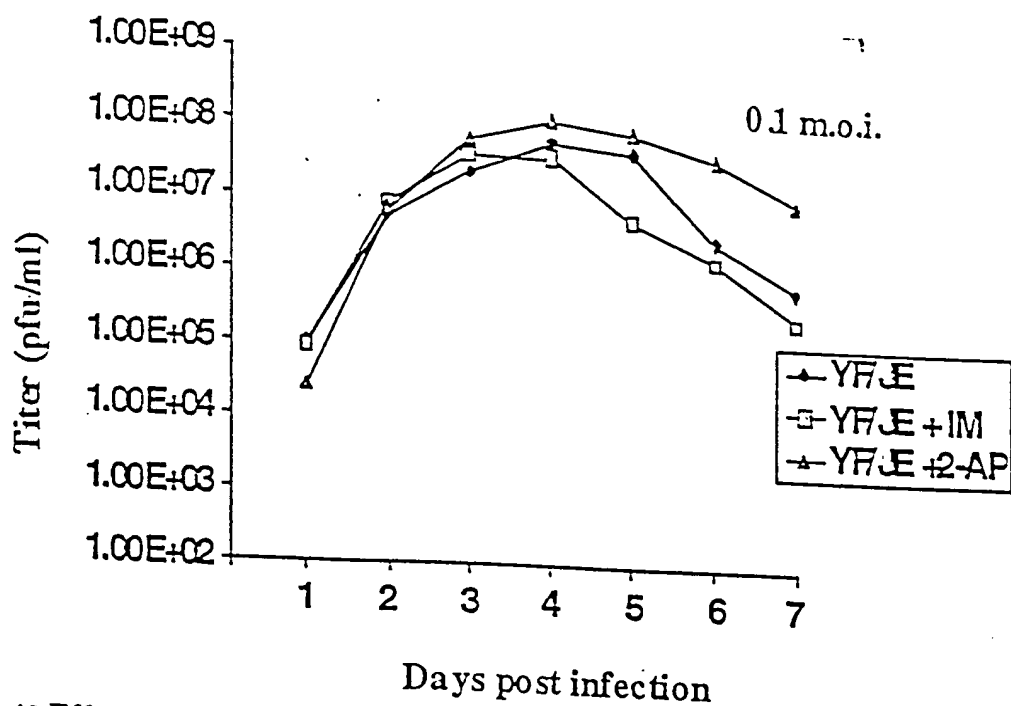
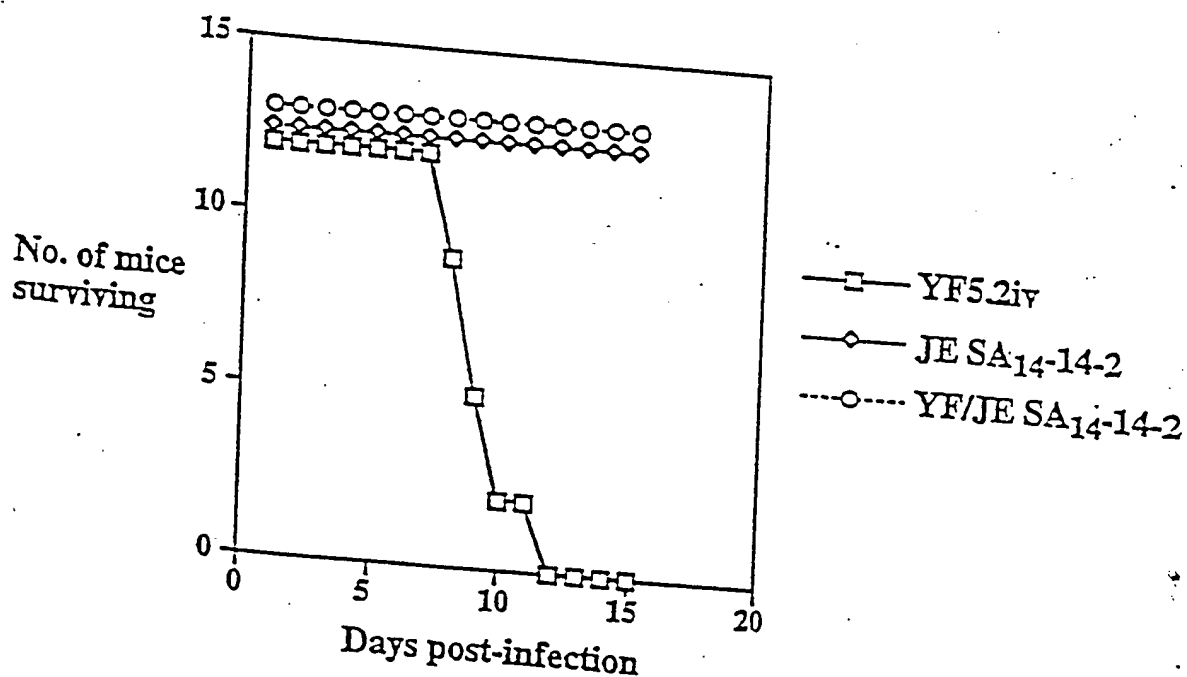


Fig. 62 Effect of indomethacin or 2-aminopurine on growth kinetics of YF/JE_{SA14-14-2} (0.1 MOI) in FRhL cells.

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Mouse neurovirulence analysis

MICE: 4 week old ICR males/females
 VIRUS DOSE: 10^4 pfu intracerebrally



Virus	Survival	P
YF5.2iv	0/12 (0%)	-
JE SA ₁₄₋₁₄₋₂	12/12 (100%)	<0.001
YF/JE SA ₁₄₋₁₄₋₂	13/13 (100%)	<0.001

Fig. 7

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Neutralizing antibody response
to YF/JE SA14-14-2 chimeric vaccine
(3-week old mice immunized, samples for testing taken at 6 weeks)

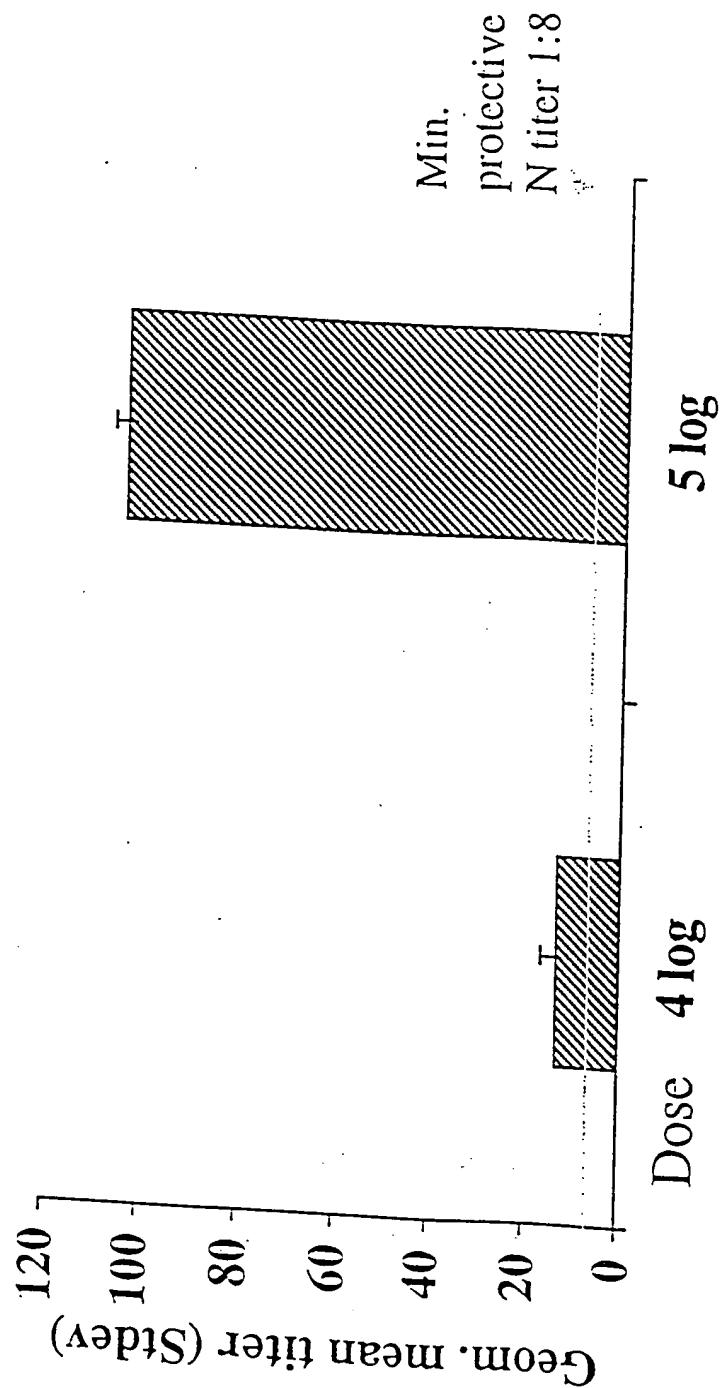


Fig. 8

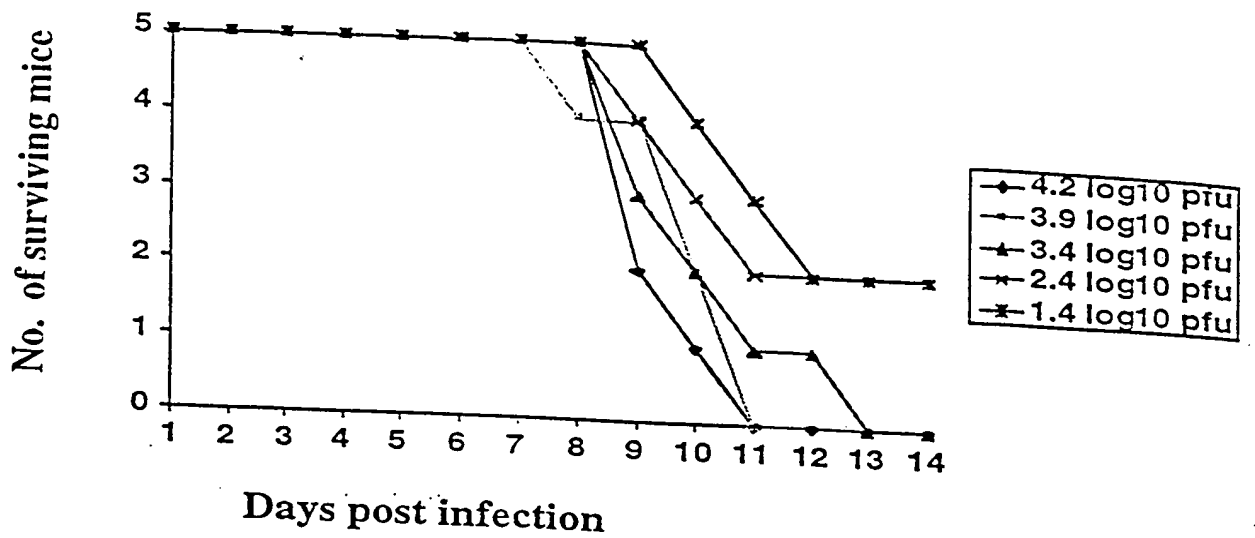


Fig. 9A. Neurovirulence testing of YF-Vax in 4-week old ICR mice by the i.c. route

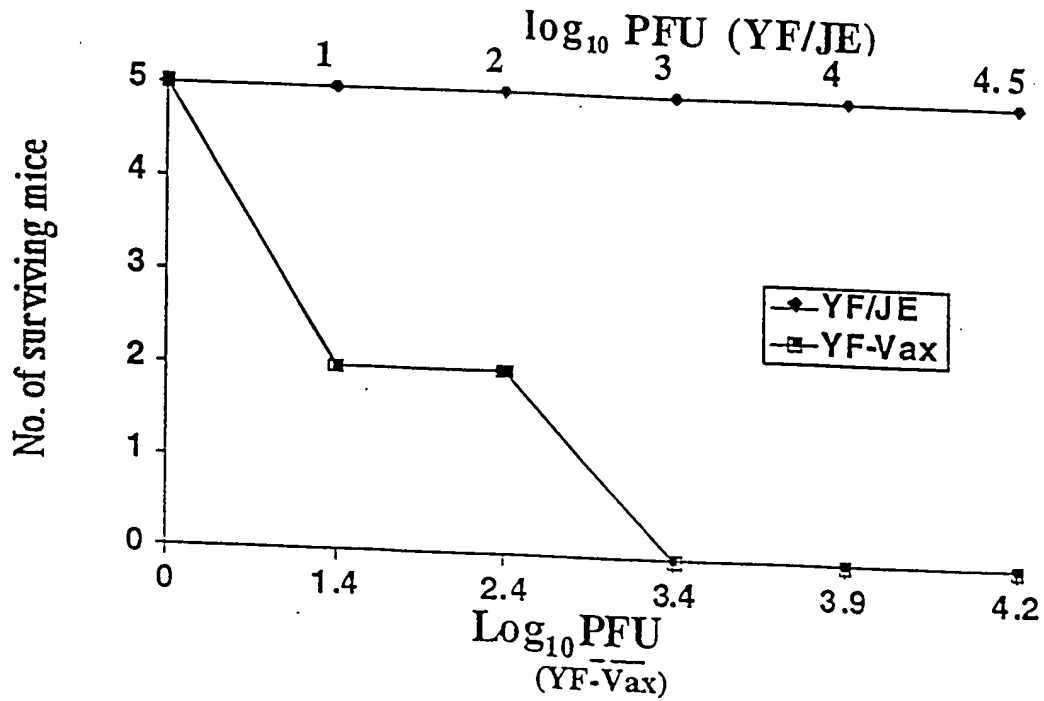


Fig. 9B. Neurovirulence testing of YF/JE_{SA14-14-2} in 4-week old ICR mice by I.C. route

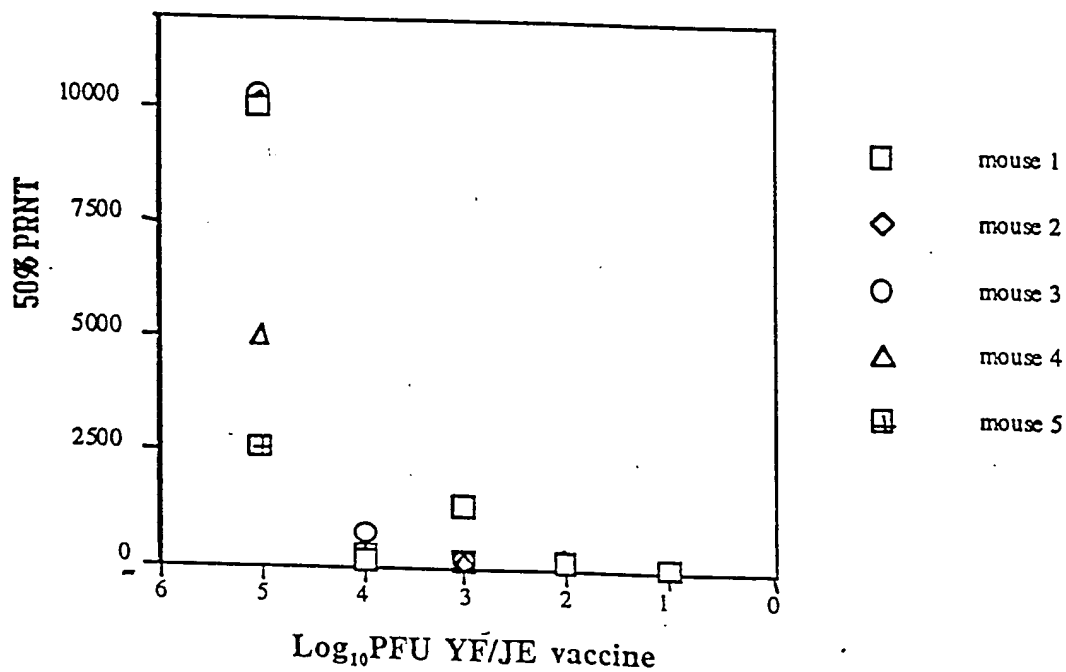
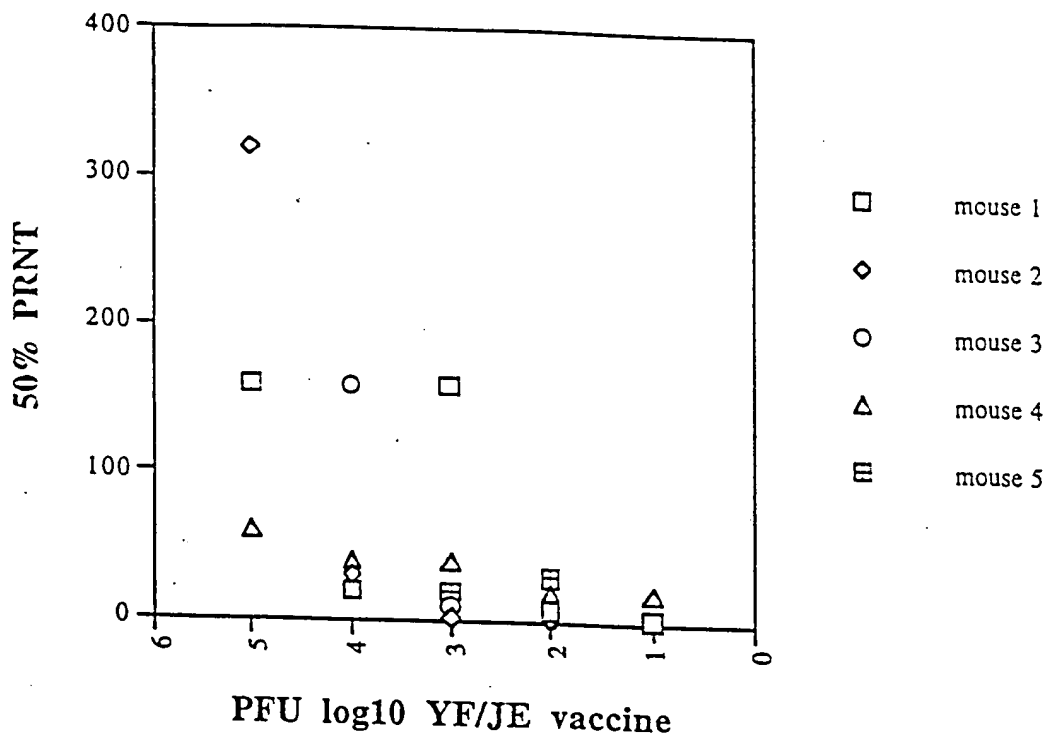


Fig. 10 Neutralizing antibody titers in mice inoculated s.c. with graded doses of YF/JE vaccine. TOP: 3 weeks post immunization and BOTTOM: 8 weeks post immunization

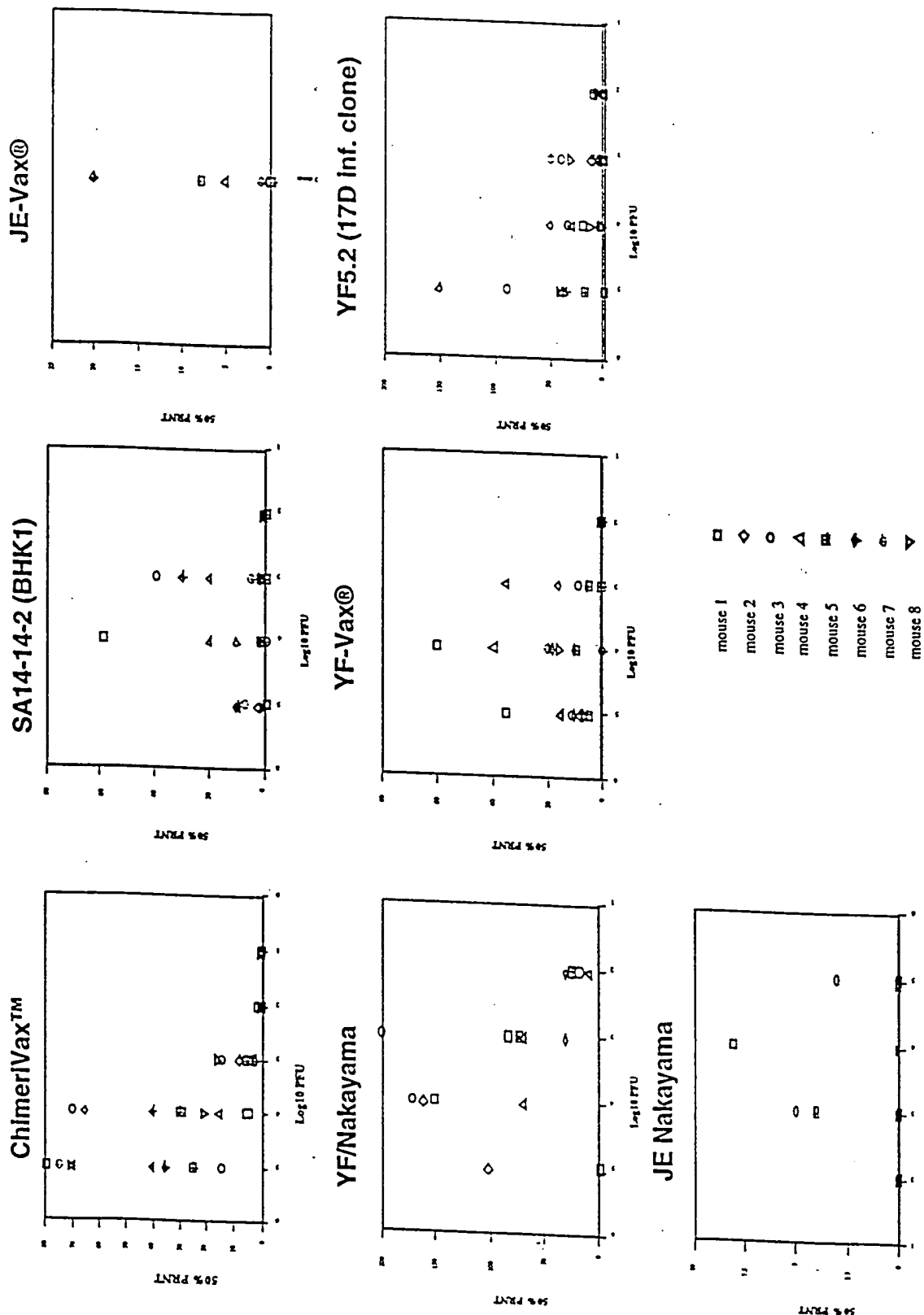


Fig. 1. SEROLOGICAL RESPONSES OF MICE IMMUNIZED WITH A SINGLE DOSE OF LIVE VIRUSES

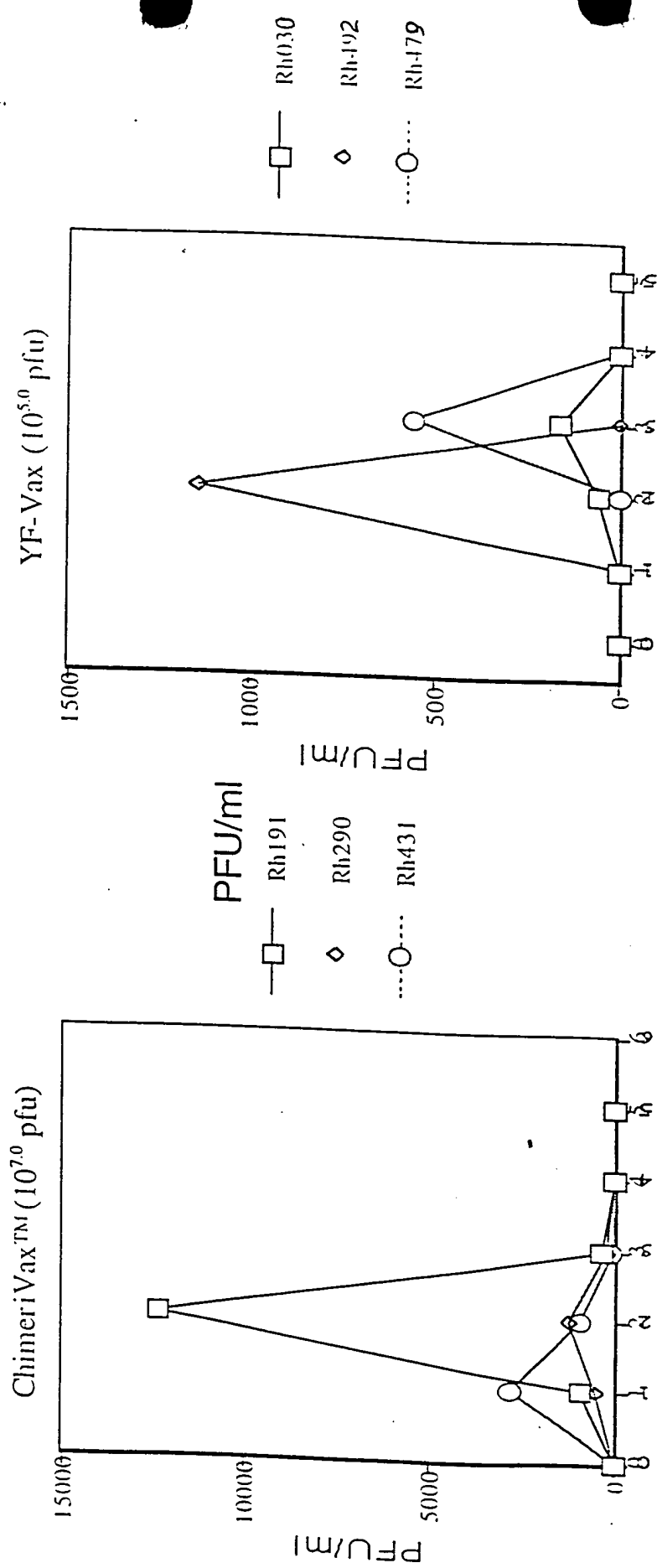


Fig. 12. Viremia and GMT of viremia in 3 rhesus monkeys inoculated with ChimeriVax™ or YF-Vax® by the I.C. route.

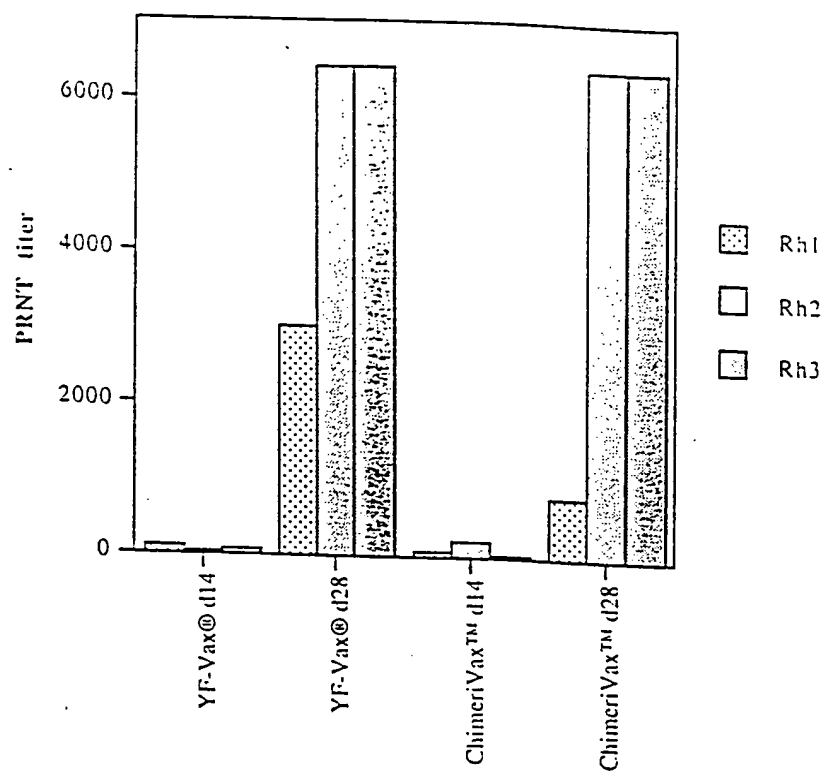


Fig. 13 Neutralizing antibody titers (50%) in rhesus monkeys 2 and 4 weeks post inoculations with a single dose of vaccines by the I.C. route.

Days post infection	YF/JE SA14-14-2 (E-138)	YF/JE SA14-14-2	YF/JE Nakayama
1	10	8	0
2	10	8	0
3	10	8	0
4	10	8	0
5	10	8	0
6	10	8	0
7	10	8	0
8	10	8	0
9	10	8	0.5
10	10	7.5	0
11	10	7.5	0
12	10	7.5	0
13	10	7.5	0
14	10	7.5	0

Fig. 14 Mouse neurovirulence testing of YF/JE SA14-14-2 (E-138 K-->E) mutant.

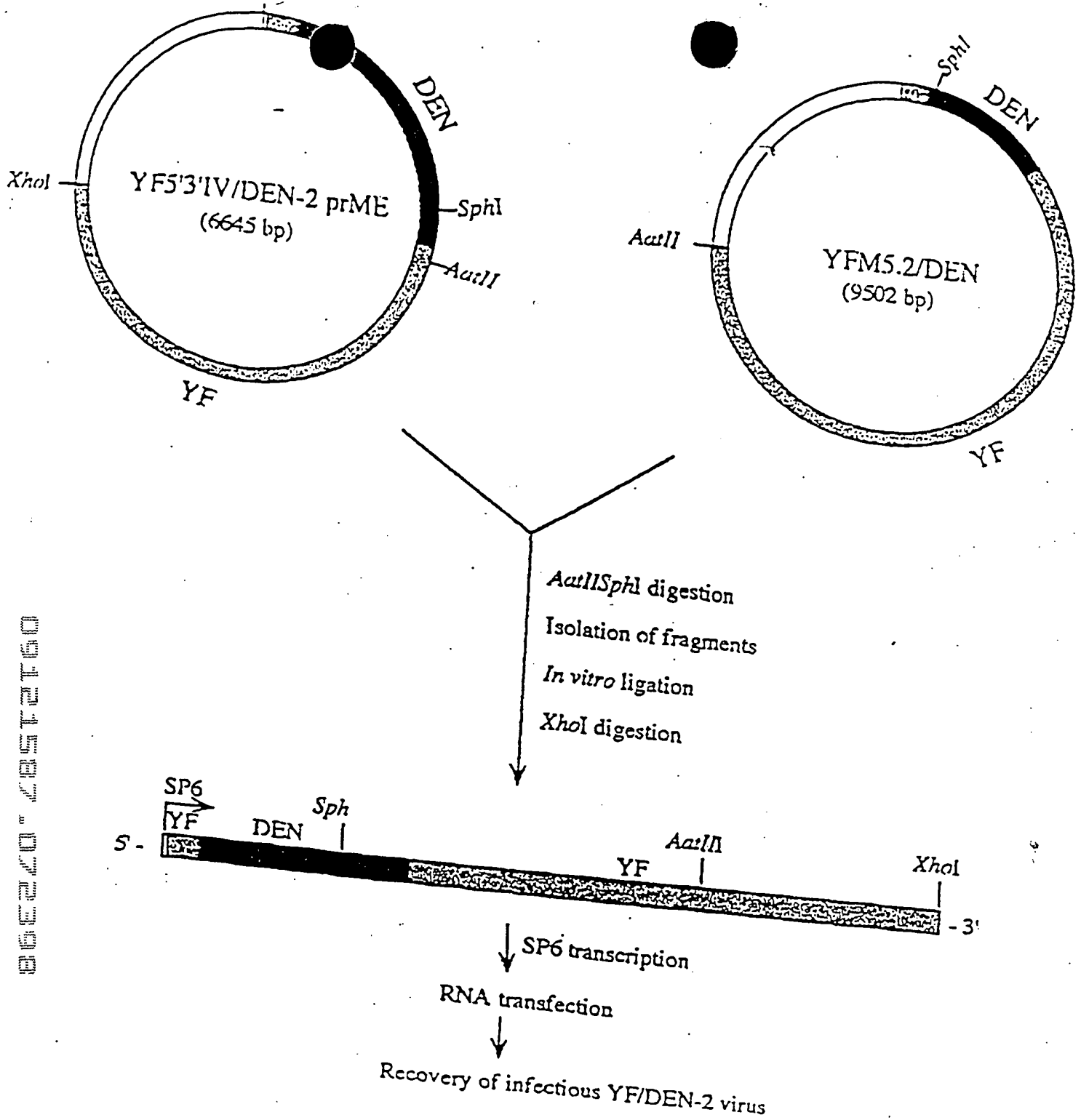


Fig. 15

Structure of modified YF clones expressing E/NS1 intergenic open reading frames

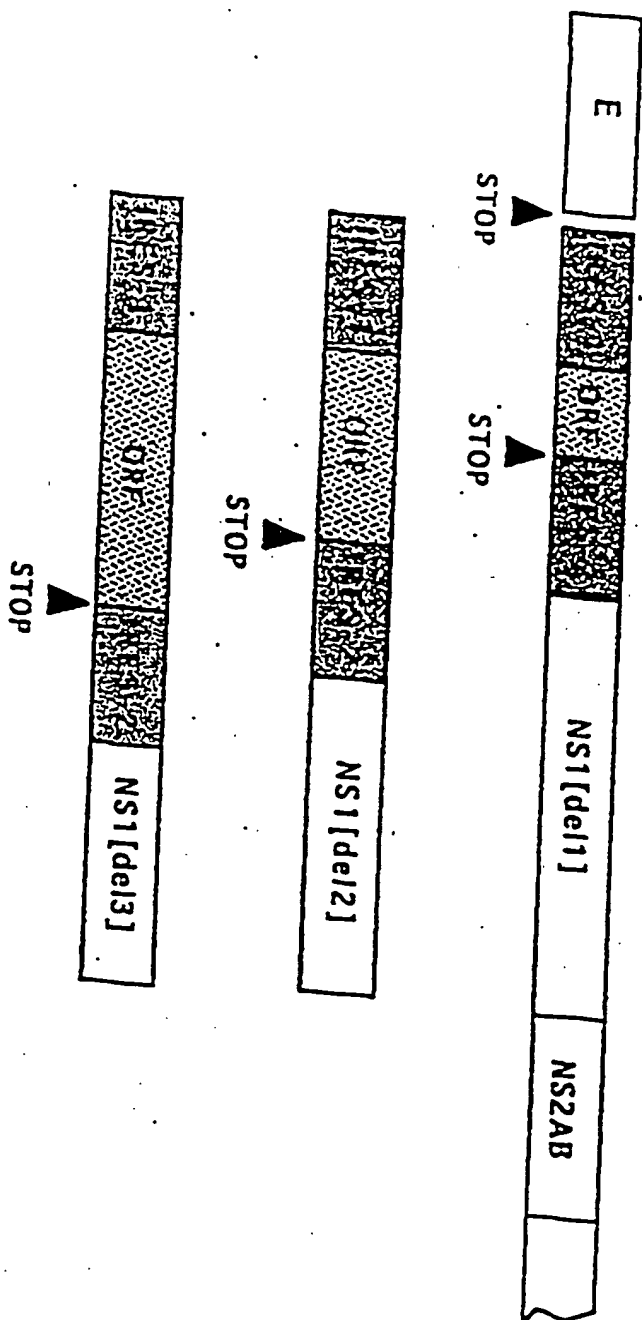


Fig. 16

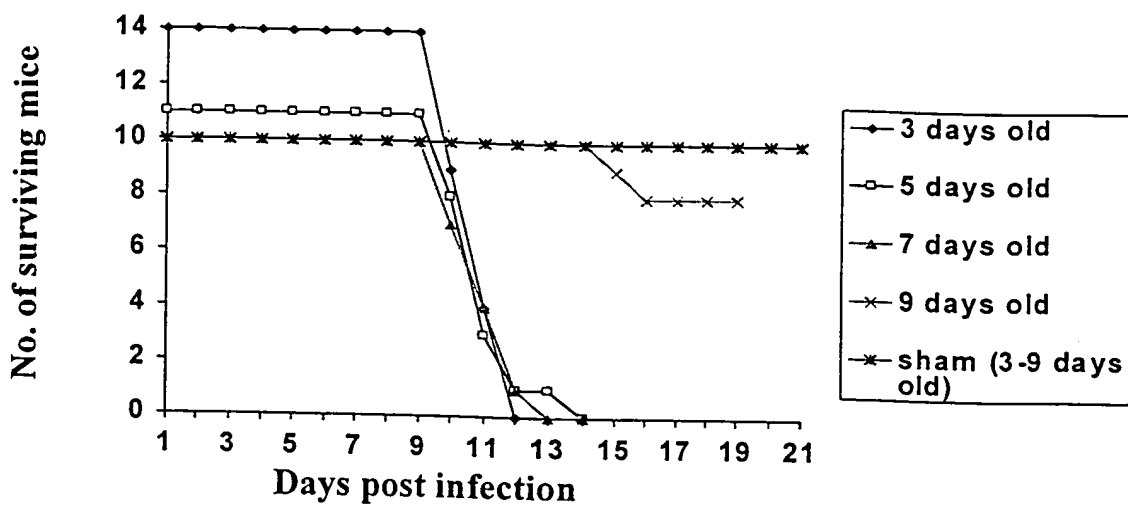


Figure 17. Neurovirulence phenotype of ChimeriVax™-Den2 in outbred (CD-1) suckling mice inoculated by the I.C. route with 10,000 PFU/0.02 ml.

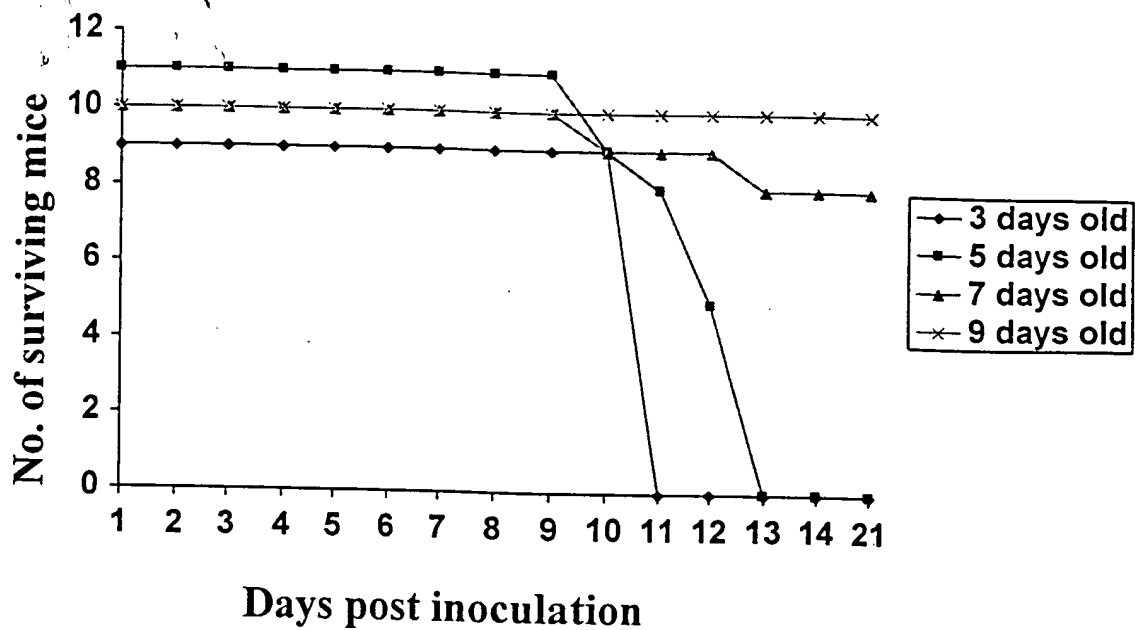


Figure 18. Neurovirulence phenotype of 17D vaccine (YF-Vax®) in outbred (CD-1) suckling mice inoculated by the I.P. route with 1000 PFU/0.02 ml.